tech.mit.edu

Volume 134, Number 13



WEATHER, p. 2 TUE: 36°F | 23°F WED: 44°F | 36°F Sunny THU: 54°F | 32°F Rain showers

Tuesday, March 18, 2014

# Student plans cover new surgery benefit Gender affirmation surgery covered

By Austin Hess

The MIT Medical Transgender Health FAQ website now lists a "Surgery" benefit of up to \$50,000 per year as part of coverage available to transgender patients under the MIT Student Extended Insurance Plan. The added coverage is for gender affirmation surgery (GAS), also known as gender reassignment surgery, in which some transgender individuals undergo procedures to modify their physical sex characteristics to match those traditionally associated with their transitioning identity.

MIT previously extended this coverage to its employees under the MIT Traditional Health Plan and MIT Choice Plan in a change announced July 30, 2013. At that time,

the change did not apply to MIT's coverage for students.

Both employee and student plans continue to cover visits with MIT providers, blood tests, and hormone therapy as part of transgender health care according to the

According to Abigail Francis, director of LGBT services at MIT, and Lucy Walsh, director of finance for MIT Medical, this change is the result of extended advocacy by several groups, including LBGT@MIT, a program under MIT's Division of Student Life and part of the Student Activities Office according to its

"[LBGT@MIT] has worked with students and with MIT Medical staff for several years to identify gender-

Insurance, Page 10

#### Manhole cover blows off, power outage follows



Around 12:30 p.m. on Friday, a problem with the MIT cogeneration plant caused a campus-wide partial power outage. Shortly before the outage, a manhole cover flew out of its housing in front of sorority Kappa Alpha Theta. Since the power plant uses the steam system for its active cooling, the two incidents are likely related.

# 1,419 students, or 7.7 percent, admitted into the Class of 2018

#### Target class size is approximately 1,050 new freshmen

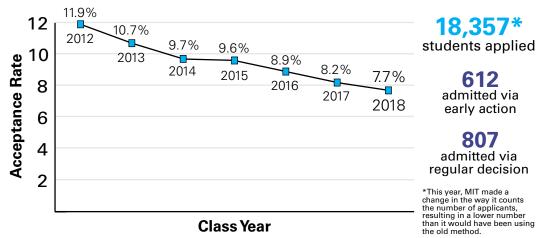
By Victoria Messuri

MIT released its undergraduate admissions decisions for the Class of 2018 on Friday, March 14 at 6:28 p.m., with a target class size somewhat smaller than those of the past few years due to the closure of Bex-

As a result, the Institute admitted only 1,419 students this year, compared to 1,548 last year. Of the 1,419 who were admitted, less than half (612 students) were admitted through early action in December. A total of 18,357 students applied, setting a record-low admission rate of 7.7 percent. According to a MIT News Office press release, the target class size for the incoming class is about 1.050 students.

According to the Dean for Un-

Admissions, Page 9



Class Year

Infographic By: Will Conway and Esme Rhine

# theory supported

**Prof. Alan Guth's** 

#### Scientific breakthrough reported

By Dennis Overbye

THE NEW YORK TIMES

CAMBRIDGE, Mass. — One night late in 1979, an itinerant young physicist named Alan Guth, with a new son and a year's appointment at Stanford, stayed up late with his notebook and equations, venturing far beyond the world of known

physics. He was trying to understand why there was no trace of some exotic particles that should have been created in the Big Bang. Instead he discovered what might have made the universe bang to begin with. A potential hitch in the presumed course of cosmic evolution could have infused space itself with a special energy that exerted a repulsive force, causing the universe to swell faster than the speed of light for a prodigiously violent instant.

If true, the rapid engorgement would solve paradoxes like why the heavens look uniform from pole to pole and not like a jagged, warped mess. The enormous ballooning would iron out all the wrinkles and irregularities. Those particles were not missing, but would be diluted beyond detection, like spit in the

"SPECTACULAR TION," Guth wrote across the top of the page and drew a double box around it.

On Monday, Guth's starship came in. Radio astronomers reported that they had seen the beginning of the Big Bang, and that his hypothesis, known undramatically as inflation, looked right.

Reaching back across 13.8 billion years to the first sliver of cosmic time with telescopes at the South Pole, a team of astronomers led by John M. Kovac of the Harvard-Smithsonian Center for Astrophysics detected ripples in the fabric of space-time — so-called gravitational waves - the signature of a universe being wrenched violently

Guth, Page 9

#### **NEWS BRIEFS**

#### Campus-wide power outage

On Friday, March 14, a campus-wide power outage impacted all MIT buildings powered by the MIT cogeneration plant. MIT Facilities reported that a manhole explosion outside of Green Hall on the corner of Amherst Alley and Danforth Street was the cause of the campus-wide power

MITAlert issued a warning to

the community at 1 p.m. on Friday asking people to avoid the area around Green Hall. At 2 p.m., MITAlert issued an update stating that power was in the process of being restored. MITAlert issued a final update at 2:45 p.m. on Friday stating that the power outage had been resolved, and that Facilities would continue working to ensure full power restoration.

Simmons Hall was the only residence hall that did not lose power completely; the power only went out for a few seconds. Internet problems at Maseeh as recent as yesterday can be attributed to the outage, given that network equipment was damaged and is in the process of being restored.

#### Trend of increasing tuition

Undergraduate tuition will increase by 3.5 percent for the 2014-2015 academic year. This increase follows a 3.45 percent increase from the 2013-14 academic year.

News briefs, Page 11

#### **IN SHORT**

Registration for the Spring Break dining plan is due today. Students who wish to participate in the plan should sign up online. The Spring Break meal plan begins March 23 and ends March 28.

Freshman award nominations **are open.** Students and members of the MIT faculty or staff may nominate any freshman for an award, which aims to recognize the distinguished achievements of freshmen in the Class of 2017.

Undergraduate Association elections will continue until 5 p.m. Friday, March 21. Vote online at http://vote.mit.edu.

Housing intention forms are due March 31. All students currently living on-campus who are eligible to do so next semester must complete the form to indicate whether they intend to stay in campus housing Fall 2014.

Send news information and tips to news@tech.mit.edu.

#### **UA ELECTION EDITORIAL**

In narrow field, Sharma and Ndengeyingoma best option

OPNION, p. 4

#### INVENTIVELY CLASSIC FASHION

Gulsha Chereli's designs: featured at the Liberty Hotel. ARTS, p. 6

#### **BLUE: BOLDLY IMAGINATIVE**

Blue Inc. provides a unique restaurant experience. ARTS, p. 7



#### THE RISKS YOU RUN WITH A MAKEOVER

Contemporary Comics: Just an edgy haircut, or a lifestyle change?

FUN, p. 5

#### **AUTUMN IN NEW YORK**

Phoniks' latest project features jazz-remixed hip-hop titles.

ARTS, p.6

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# Man named by *Newsweek* issues denial on Bitcoin claim

Dorian Satoshi Nakamoto, the man identified by *Newsweek* magazine as the founder of Bitcoin, has hired a lawyer and issued a written statement Monday denying any involvement with the digital currency.

"I did not create, invent or otherwise work on Bitcoin," Nakamoto said. "I unconditionally deny the *Newsweek* report." The statement was published through his lawyer, Ethan D. Kirschner.

"This firm has been retained by Dorian S. Nakamoto, the subject of the recent Newsweek cover story on Bitcoin," said Kirschner, an entertainment lawyer in Los Angeles. "He has issued the attached prepared statement. No further comment will be made by Mr. Nakamoto or the firm."

*Newsweek*, which has vigorously defended its reporting, responded in a brief statement saying it had "not received any statement or letter from either Nakamoto or his legal counsel. If and when we do, we will respond as necessary."

Nakamoto, 64, of Temple City, Calif., said he heard the term Bitcoin from his son only in February after the *Newsweek* reporter, Leah McGrath Goodman, contacted the son about her article.

After not publishing a print edition for more than a year, *Newsweek*, under new ownership, featured an article on its cover earlier this month reporting that it had uncovered the mysterious founder of the digital currency. Within hours of publication, the story was cast into doubt. Nakamoto, a reclusive train collector, gave a two-hour interview to The Associated Press saying that the account was incorrect.

*Newsweek*'s editor-in-chief, Jim Impoco, defended the story immediately after its publication.

"We are absolutely standing by this," he said in a phone interview at the time. "It was an exhaustive investigation."

In the statement, which was earlier reported by Felix Salmon of Reuters on his Twitter feed, Nakamoto discussed his work experience, explaining that while he had technology skills, he had no involvement with Bitcoin.

–Peter Lattman, The New York Times

# For families waiting for answers on missing flight, only more questions

BEIJING — The families gathered in the ballroom at the Lido Hotel wanted answers. Ten days before, a jet carrying their loved ones had disappeared, and for 10 days the airline executives who appeared before them had different, sometimes contradictory stories.

"What you say today is different from what you said yesterday," screamed one man who had waited along with hundreds of other relatives, desperate for any morsel of news. "How can you still not know after so many days?"

As the world puzzles over the fate of Malaysia Airlines Flight 370, which vanished on its way to Beijing on March 8, the families of the 239 people aboard the Boeing 777 jet have been stuck in a netherworld between anger and grief, clinging to the remotest hope that their relatives might still be alive as the authorities have offered conflicting and confounding explanations of what happened to the plane.

The plane went down in the Gulf of Thailand. No, it might have ended up much farther west, in the Strait of Malacca; the military somehow missed seeing it on their radar. No, actually it flew onward for much longer — up to eight hours, in fact. And one or more of the 239 people on the plane was in control of the jet the entire time. And now a satellite signal shows that it could be almost anywhere in a broad arc stretching from the Himalayas to Antarctica.

Even the news that the plane appeared to have been intentionally diverted was welcomed as a positive development. A hijacking, no matter how disturbing, still left some hope that the passengers were still alive.

—Edward Wong, The New York Times

# Are Massive Online Open Courses right for you?

By John F. Wasik
THE NEW YORK TIMES

As part of the latest wave of online learning platforms, Massive Online Open Courses (MOOCs) have gone viral. They can be useful for certain students, although those interested in changing or enhancing their careers should consider their more intensive sister, distance learning.

A MOOC is a mostly free, open course that nearly anyone can apply for and "attend" online. While there may be readings and lectures, students are generally not graded by a professor the way they would be in a traditional college course. You may often come and go as you please.

More than 4.5 million students were enrolled in MOOCs at the end of last year, with some 6 million expected to participate by 2015, according to Kate Worlock, an analyst with Outsell, a research and advisory service based in Burlingame, Calif.

The growth in MOOCs, though, spurred by course offerings from

top-tier schools like Harvard, MIT, Stanford and Yale, has yet to eclipse the population of traditional online learners, which was about 21 million at the end of 2013.

For many, MOOCs are the online intellectual equivalent of wine samplings or tasting menus. You don't have to commit to an entire course if it doesn't satisfy your intellectual palate or time constraints. Unlike the older distance-learning programs, which have been around for decades and are usually offered through individual colleges for credit, MOOCs may grant noncredit "certificates" or "verifications" that have questionable value.

If you're looking for career advancement or a new job, do MOOCs make sense? Despite the astounding variety of courses offered — including computer science and zoology — if judged by completion rates, MOOCs may not be the ideal vehicle for online learning.

In a 2013 study by the University of Pennsylvania Graduate School of Education, course completion rates were 4 percent among the programs surveyed, which followed the activity of about 1 million users. Relatively few of the users were considered to be "active," with "engagement falling off dramatically — especially after the first one to two weeks of a course," the study said.

Worlock, who has studied the low completion rates, surmises that many students may not have the time to complete a course because of family and work obligations. The typical user is "a lot older — 35 is the average age," she found. "You need to be an extremely dedicated individual to complete a course."

No standard rating system applies to online courses the way one is used for movies or vehicles. You have to know what you want.

Will a MOOC meet your needs? First, decide if the MOOC environment is right for you. For many, this is not an effective way to learn. If you find it difficult to "attend" online sessions, can't budget the time or complete a course in a self-paced environment, then you might need the structure of a distance-learning program, although it will cost much more.

# Gender inequality in Morocco continues despite changes in laws

By Aida Alami

THE NEW YORK TIMES

When Zineb lost her father at the age of 15, her grief was compounded when she learned that she had to share his inheritance with an older half-brother unknown to her or her mother and sister.

"It felt unfair to split it with him," said Zineb, 29, a teacher in Rabat who asked that her full name not be used because as a political activist she is concerned about her safety. "Somebody was parachuted into your life and we didn't know him and after all, my mom worked for half of all of that money."

A decade ago, Morocco adopted a family code hailed by women's rights groups as a big step forward. Three years ago, the country passed a new constitution guaranteeing gender equality. Even so, Moroccan women say that equality is still a long way off, and much of the old order remains untouched, including the inheritance law section of the family code. That law, laid down in the Quran, states that male relatives receive double the inheritance of women.

But the pressure for change is building. "Islam allows for reinterpretation, and it is time for radical decisions to protect women," said Saida Kouzzi, a founding partner at Mobilizing for Rights Associates, a nongovernmental organization based in Morocco. "This law of inheritance was based on the fact that men were the head of the households, which is not the case anymore as many women are the ones who provide for the family or at least contribute in a significant manner."

In 2004, Morocco rewrote its code of family law, establishing the right to divorce by mutual consent, placing limits on polygamy and raising the minimum marriage age for women to 18 from 15. But no

changes were made with respect to inheritance.

At the time, the Moroccan ruler, King Mohammed VI, had to arbitrate between the demands of feminist organizations, who were calling for an expansion of women's rights, and the Islamic political parties, who were strongly resistant to change. But terrorist bombings in 2003 that killed 45 people in Casablanca weakened the Islamist parties and paved the way for the adoption of the new family code. The king seized that opportunity to make it clear that he was the country's top religious authority.

"I can't in my capacity as commander of the faithful, permit what God has forbidden, nor forbid what the Almighty has allowed," the king said in an October 2003 address to Parliament about the changes to the family code. He also hinted that he would push to loosen religious rules without completely rejecting them.

#### WEATHER

# Winter lingering except for a few nicer days

By Shaena Berlin

STAFF METEOROLO

After a tantalizing glimpse of spring last weekend, cold weather returned to New England. Expect it to warm up into the high 40s Wednesday through Friday, then rain and snow again over the weekend. Unfortunately,

the 10-day model runs do not make next week look any more promising, so try to get some sun before it cools down again!

On this day in 1925, the most deadly tornado in U.S. history destroyed a 200 mile by 1 mile swath of land and property in Illinois, Missouri, and Indiana.

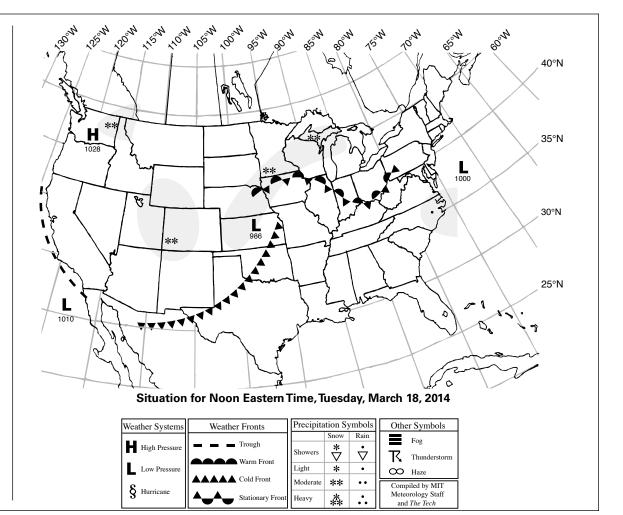
#### **Extended Forecast**

**Today**: Sunny with a high of 36°F (2°C). Calm winds. **Tonight**: Clear with a low of 23°F (-5°C).

**Tomorrow**: Mostly sunny with a high near 44°F (7°C). Low around 36°F (2°C). Breezy with east winds around 20 mph.

**Thursday**: Rain in the morning then mostly clear. High around 54°F (12°C). Low around 32°F (0°C). SW winds around 15 mph.

**Friday:** Mostly sunny with a high around 46°F (8°C). Low around 31°F (0°C).



TUESDAY, MARCH 18, 2014 THE TECH 3

# China releases plan to integrate farmers in cities

By Ian Johnson THE NEW YORK TIMES

BEIJING - China has announced a sweeping plan to manage the flow of rural residents into cities, promising to promote urbanization but also to solve some of the drastic side effects of this great uprooting.

The plan — the country's firstever attempt at broadly coordinating one of the greatest migrations in history — foresees 100 million more people moving to China's cities by 2020, while providing better access to schools and hospitals for 100 million former farmers already living in cities but who are currently denied many basic

Underpinning these jections would be government spending to build roads, railways, hospitals, schools and housing.

Formally announced Sunday, the plan has been one of the most contentious projects in recent years. Originally scheduled to be announced last year, it backs away from more radical propos-

als, which predicted even more farmers leaving the land for cities. But the plan is still ambitious, composed of 30 chapters, covering topics that include Internet access, building standards, environmental protection and public safety.

These are big numbers but they're not the crazy numbers that came out last year," said Tom Miller, a Beijing-based analyst and author of "China's Urban Billion," a look at what China's cities may look like in 2030. "They're being more realistic than they might

The plan floated last year by the government's powerful planning commission called for 70 percent of the country's nearly 1.4 billion population to be living in cities by 2025. The current plan aims for 60 percent by 2020. It also emphasizes what has been a relatively new phenomenon over the past decade: the state's role in deciding who should move from rural land and where they should live.

The need for urbanization, the plan asserts, is part of a broader move to shift China's structure away from growth based on exports and investment, and toward domestic demand. Many economists believe that urbanites consume more than farmers, who tend to be more self-sufficient.

But the plan also sees urbanization as part of China's future. It states that "urbanization is modernization" and "urbanization is an inevitable requirement for promoting social progress," noting that every developed country is urbanized and industrialized.

The plan strongly emphasizes the improvement of quality of life for new city residents through increased government spending. It also calls for improvement in the quality of building construction, which has sometimes been criticized by new residents.

"I think it's good because it touches on problems created by urbanization in the past," said Yi Peng, the director of the Urbanization Research Center of the International Finance Forum, a Chinese think tank. "Public services have been lacking and urbanization has not been rational."

## Something went 'very wrong' at GM, chief says

By Bill Vlasic and Christopher Jensen THE NEW YORK TIMES

Mary T. Barra, General Motors' chief executive, announced another round of wide-ranging recalls Monday, a sign that the company was moving with a new sense of urgency on safety problems after it disclosed a decadelong failure to fix a defect tied to 12 deaths.

The recalls, which cover 1.7 million vehicles worldwide for a variety of problems, come in addition to last month's recall of 1.6 million Chevrolet Cobalts and other models. In one of Monday's recalls, GM had alerted owners to the problem three years ago but did not make a recall.

Barra also made her most forceful comments yet on GM's need to reform its safety efforts.

Something went very wrong in our processes in this instance, and terrible things happened," she said in an internal video broadcast to

GM has come under intense pressure from government officials to explain why it took years to address faulty ignition switches that could cut off engine power and disable air bags in Cobalts and other

Barra's comments to employees - including a letter on March 4 — represent the latest effort by the company to limit the damage that the recalls have inflicted on its reputation and consumer confidence.

"Mary Barra understands the value of taking full responsibility for GM's latest, high-profile challenges, especially if she wants to send the message that this is a new GM," said Karl Brauer, an analyst with the auto-research firm Kelley Blue Book.

Investors showed scant reaction to the news. Shares of GM closed at \$34.63, up more than 1 percent on a strong day for the market.

The latest recalls followed orders by Barra to accelerate product reviews of safety issues that were already underway, the company said.

While the recalls were in various stages of completion, the company decided to announce all three actions at the same time, according to a person briefed on the decision who spoke on condition of

Barra said the move was a direct result of GM's internal review of the faulty ignition switches.

"I asked our team to redouble our efforts on pending product reviews, bring them forward and resolve them quickly," she said.

GM also took the unusual step of disclosing the estimated cost of the ignition switch recall as well as the three new recalls. The company said it expected to take a charge of \$300 million for the combined safety actions - a figure it would not normally announce until its quarterly earnings release.

There was no indication by GM that any of the affected models had been involved in accidents that resulted in injuries or deaths.

## Billionaires with big ideas are privatizing American science

By William J. Broad THE NEW YORK TIMES

Last April, President Barack Obama assembled some of the nation's most august scientific dignitaries in the East Room of the White House. Joking that his grades in physics made him a dubious candidate for "scientist in chief," he spoke of using technological innovation "to grow our economy" and unveiled "the next great American project": a \$100 million initiative to probe the mysteries of the human brain.

Along the way, he invoked the government's leading role in a history of scientific glories, from putting a man on the moon to creating the Internet. The Brain initiative, as he described it, would be a continuation of that grand tradition, an ambitious rebuttal to deep cuts in federal financing for scientific research.

"We can't afford to miss these opportunities while the rest of the

world races ahead," Obama said. "We have to seize them. I don't want the next job-creating discoveries to happen in China or India or Germany. I want them to happen right here?

Absent from his narrative, though, was the back story, one that underscores a profound change taking place in the way science is paid for and practiced in America. In fact, the government initiative grew out of richly financed private research: A decade before, Paul G. Allen, a cofounder of Microsoft, had set up a brain science institute in Seattle, to which he donated \$500 million, and Fred Kavli, a technology and real estate billionaire, had then established brain institutes at Yale, Columbia and the University of California. Scientists from those philanthropies, in turn, had helped devise the Obama administration's plan.

American science, long a source of national power and pride, is increasingly becoming a private enterprise.

In Washington, budget cuts have left the nation's research complex reeling. Labs are closing. Scientists are being laid off. Projects are being put on the shelf, especially in the risky, freewheeling realm of basic research. Yet from Silicon Valley to Wall Street, science philanthropy is hot, as many of the richest Americans seek to reinvent themselves as patrons of social progress through science research.

The result is a new calculus of influence and priorities that the scientific community views with a mix of

gratitude and trepidation. "For better or worse," said Steven A. Edwards, a policy analyst at the American Association for the Advancement of Science, "the practice of science in the 21st century is becoming shaped less by national priorities or by peer-review groups and more by the particular preferences of individuals with huge amounts of

#### Markets shrug off Crimea vote

PARIS - Global financial markets on Monday ignored the anticipated Russian annexation of Crimea, as stocks rose strongly on Wall Street and in Europe, and currencies and energy futures traded

Almost 97 percent of voters in Crimea, a historically Russianspeaking area of Ukraine, on Sunday backed union with Russia, despite warnings from the United States and European Union that a referendum would lead to sanctions against top Russian officials.

The adoption of sanctions on "about 20 people" announced Monday by EU foreign ministers "are already priced in by the markets," Mujtaba Rahman, Europe director for Eurasia Group, wrote in a research note. "The market is now in a holding pattern, looking at whether we get further incursions by Russia into Ukraine proper. It's all about Putin and his next chess move."

In afternoon trading, the Euro Stoxx 50 index, a barometer of eurozone blue chips, had risen 1.2 percent, while the FTSE 100 index in London had gained 0.9 percent. The Standard & Poor's 500 index and the Dow Jones industrial average were up about 1 percent by midday, after a government report showed factory production had risen in February. Russia's Micex index was up 2.5 percent, and the dollar was trading at 36.33 rubles, down 0.8 percent.

Investors are closely watching for indications that Russia's oligarch class is moving its billions of dollars in savings — money the country's most wealthy have in recent years invested in things like real estate in London, Paris and New York, as well as in financial assets in Western Europe and the United States. The calm market conditions Monday suggested that there was no fire sale taking place.

Vladimir Bragin, head of research at Alfa Capital in Moscow, said it appeared that the central bank had spent about \$500 million Monday to support the ruble, after large-scale market intervention last

European energy markets were not overly concerned about the possibility of interruptions of natural gas flows from Russia to Europe. Trevor Sikorski, an analyst at the London-based research firm Energy Aspects, said traders were reassured by the presence of large amounts of stored gas in Europe because of the warm winter.

—David Jolly, The New York Times

#### Arrests of rights activists in Sri Lanka raise fears of a crackdown

NEW DELHI — Fears of a broad crackdown against rights activists in Sri Lanka have been heightened after the Sri Lankan police recently arrested two prominent human rights advocates and a woman who has made a public campaign of finding her missing son.

The arrests took place just as the U.N. Human Rights Council considers starting an inquiry into possible war crimes committed by government forces and separatists during Sri Lanka's 26-year civil war.

Ruki Fernando, one of Sri Lanka's most prominent human rights activists, and the Rev. Praveen Mahesan, a Roman Catholic priest and the former director of the Jaffna-based Center for Peace and Reconciliation, were detained at around 10 p.m. Sunday by Sri Lanka's Terrorist Investigation Department in Kilinochchi, a former rebel

The Sri Lankan police said the two activists were being held under the country's laws. "They have been arrested on charges of creating communal disharmony and inciting racial hatred," said Ajith Rohana, a police spokesman. He said the two would be brought to Colombo, the capital, for further interrogation.

On Friday, the government arrested Jeyakumari Balendran, an advocate for efforts to find missing people, on charges of harboring an armed man. Her son, a child conscript to rebel forces, is still missing after he reportedly surrendered to government forces in 2009 and then was pictured in a government publication about rebel rehabilitation. Balendran's 13-year-old daughter was taken into custody Friday and has since been given to child probation officers, the police

—Gardiner Harris and Dharisha Bastians, The New York Times

#### Judge accepts general's plea deal in sexual-assault case

FORT BRAGG, N.C. - A military judge accepted guilty pleas Monday in the sexual assault case of Brig. Gen. Jeffrey A. Sinclair in a deal that allowed him to admit lesser charges in exchange for the dismissal of far more serious charges.

The hearing Monday at Fort Bragg was the latest development in the prosecution of Sinclair in the military's most closely watched sexual assault case. In exchange for the pleas on the lesser charges, secutors dismissed more serious counts against Sinclair, including that he twice forced his former mistress, an Army captain, into oral sex and threatened to kill her and her family.

Once Sinclair's sentence is decided, possibly later this week, the problem-fraught two-year case will finally draw to a close.

The deal caps the surprisingly rapid and, for the military, embarrassing collapse of what once seemed a powerful case — an unraveling that began after Army prosecutors concluded that their chief witness, the captain, who had been the general's lover for three years, might have lied under oath at a pretrial hearing in January.

The guilty pleas will also end the decorated 27-year career of Sinclair, once a fast-rising star. The general, who could have faced life in prison if convicted on the sexual assault charges, will almost certainly receive a far lighter sentence, but will be required to leave the military.

The deal could still set up a showdown. Defense lawyers said military prosecutors might call the captain — as well as her parents, who are from Nebraska — as witnesses at a sentencing hearing this week in an effort to persuade the judge to impose a tougher punishment on Sinclair.

But that would allow the general's defense team, led by a former federal prosecutor, to cross-examine the 34-year-old woman, a military intelligence officer, with what they assert are numerous instances of contradictions or deceptions discovered during a year of trial preparation.

Sinclair, 51 and married with two children, was deputy commander of the 82nd Airborne Division and of American forces in southern Afghanistan when he was recalled in 2012. Until then, he was seen within the military as an officer who could progress to division commander or higher.

-Richard A. Oppel Jr, The New York Times



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#### **EDITORIAL**

# In a weak field, Sharma and Ndengeyingoma best option

## Specificity, realistic goals lacking from all tickets

By the end of the week, MIT undergraduates will choose Andrew M. Acker '15 and Grace E. O'Malley '15, Shruthi Sharma '15 and Billy Ndengeyingoma '15, or Jeffrey M. Sperling '15 and Nathan H. Varady '16 to be the next Undergraduate Association president and vice president. It is encouraging to see three tickets so eager to tackle the challenges facing undergraduates. But the leaders of the UA need not only detailed, specific proposals, but also the experience and tact to realize their

Unfortunately, The Tech does not believe that any one of the three tickets fully satisfies these criteria.

The candidates' platforms tend to resemble wish lists rather than detailed policy proposals. Furthermore, vague appeals for increased "transparency" and "communication" were common to all three candidacies in the P/VP debate held by The Tech and the UA on Wednesday, March 12. Nevertheless, we believe that Shruti Sharma and Billy Ndengeyingoma are the best option to lead the UA.

Sharma and Ndengeyingoma have demonstrated thorough institutional knowledge and an encouraging ability to foster relationships with administrators. When pressed to defend the feasibility of students influencing MIT's policy on online education, Sharma specifically referenced a plan for working with Sanjay E. Sarma, MIT's first director of online learning. And Ndengeyingoma is particularly adept at articulating the ticket's plans, as well as providing details of implementation when necessary.

Our optimism is curbed by the fact that several of the ticket's specific ideas have already been tried, only to be proven ineffective. UA drop-in hours and a monthly newsletter are well-intentioned but simply haven't

Additionally, while many of their individual platform goals are more feasible than their opponents, their list of objectives is far too long to be implemented in one term. Still, we believe Sharma and Ndengeyingoma can prioritize appropriately, and we therefore recommend them as the first choice for UA P/VP.

We recommend ranking Andrew Acker and Grace O'Malley second. This ticket portraved themselves as "UA outsiders" and "fresh faces" and claimed that the ingenuity of their ideas would outweigh their lack of experience. But even slight scrutiny of their platform shows that this isn't the

Student/faculty dinner enhancements, academic mentoring programs by graduates for undergraduates, online resource education for incoming freshmen, and social initiatives are all commendable goals. But they are not compelling enough to overcome a lack of critical institutional knowledge and experience.

Acker and O'Malley were unable to provide specifics on a number of UA and MIT policies during the debate and frequently seemed left out of conversations on topics the UA president would almost certainly have to address. While their leadership skills would be valuable in the UA, the presidency requires a great deal of familiarity with the MIT administration's processes and workings, which would be difficult to learn, let alone leverage, within a single term.

#### Hopefully future candidates will put forward more detailed and specific proposals. We hope this year's field yields effective leaders.

We believe the Sperling/Varady ticket should be ranked third. We worry that by overestimating the power of the UA, they fail to realize that many of their goals are unrealistic, and they may instead push forward in ways that will damage the UA's long-term credibility.

For example, their platform indicates that they want to make large changes to the curriculum to increase flexible major options, open the meetings of the Academic Council to undergraduates (while failing to note that even faculty have only one representative on the Council), publicize results of the generally confidential MIT Corporation Visiting Committees, and make significant operational changes to the Student Center.

Each of these projects would be difficult to complete even if the P/ VP spent their entire term on nothing else, but Sperling and Varady seem to think that their experience will allow them to achieve their goals through sheer force of will alone.

Most importantly, we doubt that the pair will have the tact and sensitivity necessary to manage complex, confidential, and sensitive situations as P/ VP. Sperling repeatedly brought up his experience on other committees as evidence that he was qualified for the job, although Sharma questioned his performance and attendance at such meetings.

To clarify, The Tech spoke to former UA Chief of Staff Ravi M. Charan '14, who was in charge of selecting students for committees from Fall 2012 to Spring 2013. Charan said of Sperling, "Jeff often missed and rarely paid attention in meetings of the nominations committee (the UA committee that nominates students to faculty-run Institute Committees). Additionally, he did not conduct as many student interviews as other committee members. There was also negative feedback from fellow student committee members about his performance as a member of an Institute Committee, the Committee on the Undergraduate Program."

When asked to comment, Sperling maintained that he "attended every nominations committee meeting except for those that conflicted with varsity tennis," and that he "attended all his scheduled interview times." Regarding the alleged negative feedback from other committee members, Sperling claimed that he was urged to "scale back [his] advocacy on smaller issues so the faculty would be more receptive to [their] suggestions on larger topics."

Additionally, on Monday, the first day of voting, the pair sent emails to the MIT addresses of many undergraduates, in a violation of both UA election rules and MITnet rules of use, according to an email to undergraduates from UA Election Commission Chair Leonid Grinberg '14.

This kind of careless behavior would not only impede their work but also potentially threaten the future credibility of the UA.

We cannot forget that all six of these candidates have shown a sincere desire to improve the lives of undergraduates, and we applaud them for doing so. But desire alone doesn't yield results, and hopefully future candidates will put forward more specific and realistic proposals. Until then, we hope that this year's field — despite its inadequacies - will still produce an effective administration.

#### CORRECTIONS

A SpringFest article in last Tuesday's issue reported that funds for the event come from the student life fee paid by undergraduates, neglecting to mention hat graduate students also pay the student life fee. SpringFest is also supportec by ticket sales.

#### **OPINION POLICY**

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Letters to the editor, columns, and editorial cartoons are written by individuals and represent the opinion of the author, not necessarily that of the newspaper. Electronic submissions are encouraged and should be sent to letters@tech.mit.edu. Hard copy submissions should be addressed to The Tech, P.O. Box 397029, Cambridge, Mass. 02139-7029, or sent by interdepartmental mail to Room W20-483. All submissions are due by 4:30 p.m. two days before the date of publication.

Letters, columns, and cartoons must bear the authors' signatures, addresses, and phone numbers. Unsigned letters will not be accepted. The Tech reserves the right to edit or condense letters; shorter letters will be given higher priority.

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# NEUNEUNEUNEUN TUNEUI

#### Sudoku I

Solution, page 11

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Instructions: Fill in the grid so that each column, row, and 3 by 3 grid contains exactly one of each of the digits 1 through 9.

#### Techdoku I

Solution, page 11

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Instructions: Fill in the grid so that each column and row contains exactly one of each of the numbers 1–6. Follow the mathematical operations for each box.

## Sudoku II

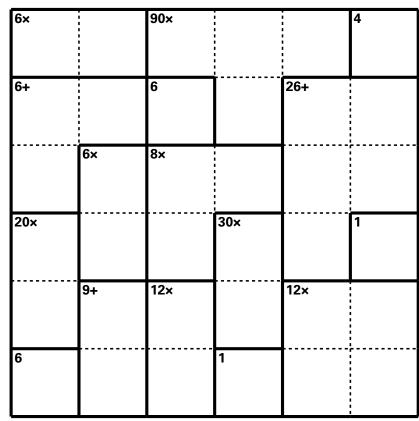
Solution, page 11

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Instructions: Fill in the grid so that each column, row, and 3 by 3 grid contains exactly one of each of the digits 1 through 9.

#### Techdoku II

Solution, page 11



Instructions: Fill in the grid so that each column and row contains exactly one of each of the numbers 1–6. Follow the mathematical operations for each box.



#### **FASHION REVIEW**

## **Architecture for the body**

Designer connects buildings to feminine fashion

The Istanbul-native designer Gulsha Chereli designs elegant and unique clothes for women.

By Rachel Katz STAFF WRITER

Designer Gulsha Chereli always thinks of texture first when she begins her design process, and that mindset was apparent in the collection she showcased at the Liberty Hotel last Thursday night. Even in the first round of designs shown, which favored a neutral color scheme, the texture and layer play was prominent: leather was paired with satin like fabric in a wraparound trench coat, the slim silhouette of a miniskirt was countered with draped fabric over the front of the piece, fabric traditionally used in businesslike blazers was molded into a Moto jacket, and black lace was integrated into every design. The line had a high fashion feel, but with a practicality that would make it easily

#### Chereli modeled her collections on classic silhouettes this season.

Chereli modeled her collections on classic silhouettes this season, saying, "I want this collection to be sexy, feminine, but still classic and elegant at the same time. And of course with an edge!" It certainly was; only one design in the collection featured pants rather than a skirt or dress, and the dresses all accentuated the waist for a sleek, sexy look. Drawing inspiration from architecture,

Chereli added an edge to classic silhouettes, stating, "I love how each city has a unique mood and voice; I enjoy using that feeling in my collections." The moods in her pieces seemed to be expressed with dramatic slits, layered ruching, and an emphasis on oneshoulder, geometric necklines.

Fashion and design run in Gulsha Chereli's blood; her mother works as a miniature artist, and her father has a clothing line for children. "I think I got both their skills and combined them in my brand," she tells The Tech. She begins each collection with a seed of inspiration, and from there searches for "pictures, colors, textures, anything that reminds me of that inspiration. I draw my designs and start patterns and samples — if something needs to be changed or modified,

#### Gulshachereli Runway Show

COURTESY OF GULSHACHERELI

Fashionably Late

Designer: Gulshachereli March 6

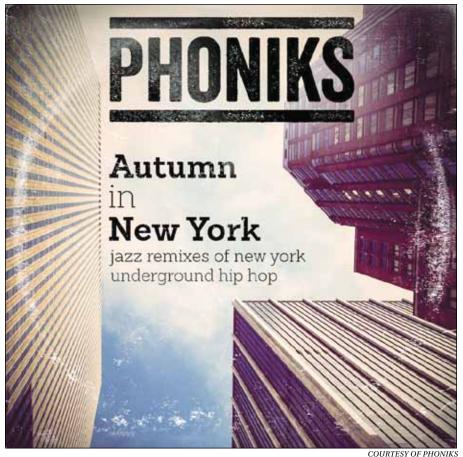
Liberty Hotel, Boston

I do it in the process according to my taste." Her process has culminated in a beautiful collection of classical designs with a brilliant,

#### **MUSIC REVIEW**

## Word is born

Autumn in New York pays tribute to hip-hop's classic acts



Phoniks' new musical project Autumn in New York is a collection of jazz-remixed hiphop tracks.

#### By Nate Garcia

"The What." It's not a question. March 9 marked the 17th anniversary of the death of Christopher Wallace, pioneer of the Brooklyn Way, known to the world as the

Notorious BIG, Biggie Smalls, or affectionately as just BIG. A titan in hip-hop, BIG elevated listeners through his music and continues to inspire artists today. Maine-based producer Phoniks pays homage to BIG and other classic acts in his latest project Autumn in New

York. The project features a collection of jazzremixed hip-hop titles immediately recognizable to fans of the city's illustrious history, including BIG's classic "The What," featuring Method Man from his debut *Ready to Die*.

Jazz's influence in hip-hop is widespread, heard in the use of samples for instrumentals, coloring rhythm, and in scat singing's influence on rhyme delivery and flow. Much of the underlying structure of hip-hop is derived from jazz, and their shared foundation allows for smooth collaboration between the two genres. Their fusion has resulted in heautiful projects, such as Guru's Jazzmatazz and Funky DL's Jazzmatic, a collection of jazz-remixed Nas classics.

#### The legacy of hip-hop welcomes Phoniks' **Autumn in New York** among its numbers.

The legacy of jazz hip-hop welcomes Phoniks' Autumn in New York among its numbers. The soulful sounds of horns and brass along with playful and lighthearted piano are prevalent throughout. Drums supply the support — snares are shared by both genres, and deeper bass drums set the tempo for emcees to reinvent and push the boundaries of the art even further. Whether accompanying BIG's melodic flow, Mos Def's sing-song delivery, or Pun's buckshot rhymes, Phoniks deftly melds music to join voice, softening rugged styles without detracting from their authenticity.

Perhaps the most interesting track is the remix of "Ready or Not" by the Fugees. With their reggae-influenced blend of hip-hop, sung vocals, and island intonations, the track

\*\*\*\* Autumn in New York **Phoniks** Released Feb. 3, 2014

would seem difficult to blend with jazz. But the rewarding result lends yet another lens to the Fugees' variable style. My personal favorite is the final track, opening with a pian riff, which, once established is fluidly graced by Nas' assertions that if you need proof of his credentials, "Go ask my pre-school, even talk to my old principal. He'd tell you how I used to pack a No. 2 pencil." Followed in form by trackmates Pun, Jadakiss, Raekwon, and Fat Joe, the group represents for their city's place in history.

From the opening sample citing hip-hop's reinvigoration of jazz to the fading keys of the closing track, Autumn in New York is deeply rooted in hip-hop's culture, pulling from a storied cast of emcees and tracks with classic status. Phoniks' idols Pete Rock, Lord Finesse, Diamond D, and others serve as teachers to this producer's style, and their influence is clearly seen in his high quality work.

"And if you don't know, now you know."

Other recent notables albums: DJ Premier — *March 9th (BIG tribute)* 

De La Soul — Dilla Plugged In Showbiz (of D.I.T.C) — Rare Breaks: Stack

Editorial Note: "Word is Born" is a new column about hip-hop, its influences, and its history. Nate also hosts "Word is Born" on Saturday nights from 10 p.m. to midnight at WMBR 88.1 First on Your FM Dial.

#### D

# A culinary rhapsody in blue

#### Inspired new American cuisine

By Juan Alvarez and Katie Villa

For our latest night out on the town, we ventured into the financial district and visited Blue Inc., a place for wild culinary adventures helmed by Chef Jason Santos of FOX's "Hell's Kitchen." It was a little hard to get there — it was a

10 minute walk from the Downtown Crossing T station — but the food and the handcrafted cocktails were definitely worth the trip. Blue Inc. serves mostly new American-style cuisine, although many of the dishes are inspired by Asian spices and flavors. With six in our group, we were able to share and sample a variety of dishes.

We began with a selection of appetizers, each more delicious than the last. The calamari "spaghetti" (\$10) consisted of thinly sliced calamari rings, appropriately fresh and melt-in-your-mouth tender. This was served with a delectable pastrami Bolognese and a piece of garlic bread, toasted to crispy perfection but still soft in the

middle. Next was the crispy pork belly (\$12), a generous slab of succulent pork served with balled apples and a sweet sauce that nicely complemented the savory pork. But the real highlight of the

appetizers was the buffalo duck drumettes (\$12), a twist on traditional chicken wings. Covered in a tangy spicy-sweet barbecue sauce and served with chipotle mayo on the side, the duck legs were simply finger-licking tasty.

For entrees, duck was the star of the show again. The honey and hoisin-glazed duck confit (\$26), was an Asian-inspired delight for the taste buds. Served on a bed of sweet sticky rice with mango and cashews, the duck had a mild savory-sweet flavor that we greatly enjoyed. The crunchy Ahi tuna (\$26) was also a nice choice, accompanied with steamed rice, sesame avocado, and yuzu green beans in a sweet and creamy sakeapple puree. With the exception of the beans, the flavors in this dish were perhaps too mild, and may have benefited from added spices or some traditional wasabi. We also had a bite of the southernstyle boneless fried chicken (\$26), which was just otherworldly. Served on a pepper jack waffle with bacon, poached pear, and

\*\*\*\*

Blue Inc.

131 Broad St., Boston

Monday – Friday: 11:30 a.m. – 2:00 p.m.

Saturday: 5 p.m. – 2 a.m.

**Sunday: Closed** 

smoked maple caramel, we plot-

ted a return just for this dish. Dessert, always a favorite, did not disappoint at Blue Inc. Amid a variety of nontraditional liquid nitrogen milkshake flavors, such as pumpkin pie, caramel corn, and chai green tea, we tried the S'mores milkshake and felt like very happy campers. Clearly our chef used top-quality chocolate in the shake, topping it off with graham cracker crumbs (this must have been what that \$5 shake in *Pulp Fiction* tasted like). Ideal for a special occasion, Blue Inc. is definitely near the top of our list of happening spots with quality and boldly imaginative cuisine and is a unique restaurant experience not to be missed.



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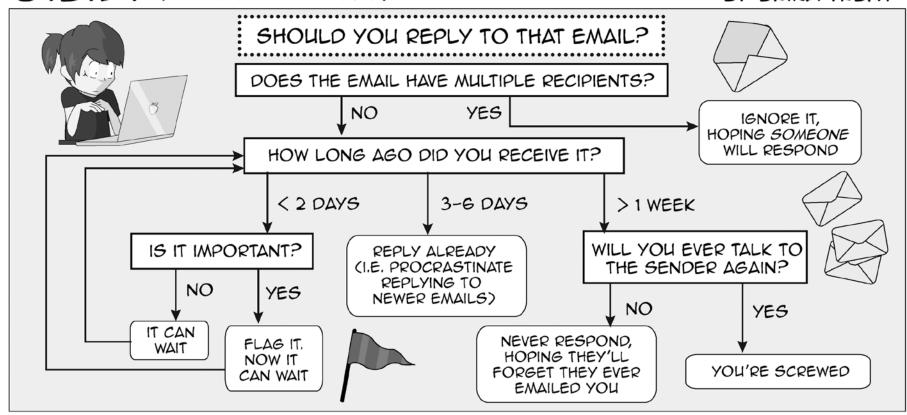
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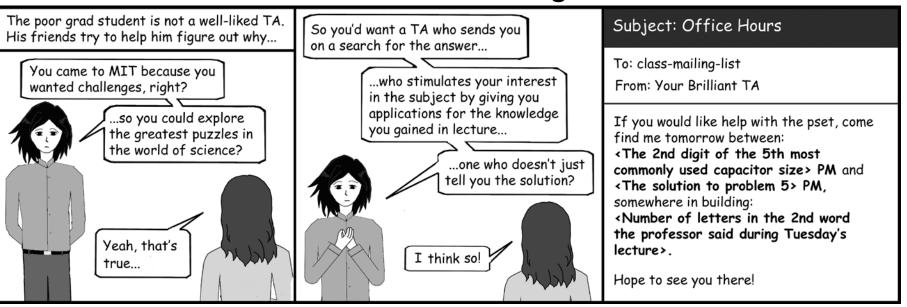
Q.E.D. (QUITE EASILY DONE)

#### BY ERIKA TRENT

WWW.QEDCOMICS.COM



## Somewhere on the Search for Meaning... by Letitia Li



### Saturday Stumper by Frank Lugo

Solution, page 10

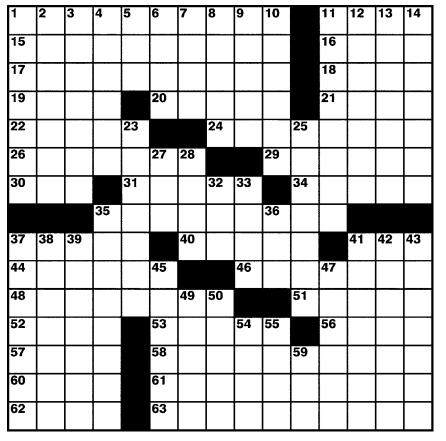
#### **ACROSS**

- 1 "The blood is the life!" penner
- 11 Hamburger course
- 15 Tops
- 16 Realty datum
- 17 Part of some vinegar recipes
- 18 Red alert
- 19 Metaphorical pretense
- 20 New England college town
- 21 Necessitates striking, say
- 22 Subject of the books Power Failure
- and Pipe Dreams 24 Without incurring damages?
- 26 What an asterisk often means
- 29 Drop of medicine
- 30 Possible results of going long
- 31 Species subgroups
- 34 Producer of some shells
- 35 Last chance to make the cut 37 Marching-band accessory
- 40 Entangles
- 41 What a lazy lyricist might use
- 44 Common way to buy glasses 46 Got moving, so to speak
- 48 Tundra rodent hunter
- 51 Fabricated
- 52 Station on the Paris-Cherbourg
- 53 One's due, on the street
- 56 Cartoonist who popularized "double whammy"
- 57 Brownie brand
- 58 An alien might miss it
- 60 Crayola color similar to Asparagus
- 61 By hook or by crook

- 62 Spill something, with "up"
- 63 "Rising star" of NCAA Division I

#### **DOWN**

- 1 Least likely to shrink
- 2 Got sweeter, perhaps
- 3 Seeks
- 4 National Gallery endower
- 5 GPS reading
- 6 It could hold your notice
- 7 Scheherazade soloist
- 8 Taekwondo's origin
- 9 Main 10 Think none too highly of
- 11 What goes on before the finish
- 12 Music inspired by Sgt. Pepper
- 13 "They" alternative
- 14 Rhapsody.com purchase of 2011
- 23 "Inconceivable!"
- 25 "Greatest singer in the world," per Presley
- 27 Impeccability indicator
- 28 Reason for a review
- 32 Old Testament priest
- 33 Tesla, for one 35 Party hang-ups
- 36 In \_\_ Speramus (Brown motto)
- 37 Shortens, in a way
- 38 Hammer-handle source
- 39 Ones alleviating that sinking feeling?
- 41 Queen of comedy
- 42 Avoid crossing
- 43 Twist, in the end 45 Of fashionable society
- 47 Small racer
- 49 Put on the sheets?
- 50 Prodigious folk-music archivist 54 Clinton Transportation and Energy
- Secretary
- 55 Gould/Sutherland's M\*A\*S\*H followup with title asterisks
- 59 Wax buildup?



Tuesday, March 18, 2014

The Tech 9

# MIT grants fewer admissions to 2018's

#### Bexley closure and high yield cited

Admissions, from Page 1

dergraduate Education's office, the number of undergraduate students was expected to increase over three years, starting with the Class of 2015 and ending with the Class of 2018, due to the additional housing capacity afforded by the reopening of Maseeh Hall in the fall of 2011.

According to enrollment statistics from the Office of the Registrar, first-year student enrollment increased for the Classes of 2015 and 2016, but the current freshman class actually experienced a slight decrease in first-year student enrollment. The number of first-year students to be enrolled for the 2013-2014 academic year is expected to fall even lower than this year's.

The loss of accommodation provided by Bexley Hall, which housed 116 undergraduate students, is significant and long-term. Bexley was closed on June 8, 2013 after the building was deemed unsafe for residents due to structural problems. Plans for Bexley's demolition, or what will be built in its place, have not yet been determined.

"Housing capacity is an important consideration in determining our target class size," Dean of Admissions Stuart Schmill '86 told *The Tech*.

He continued, "Our target this year is about 70 fewer students than last year." There were 1,118 first-year students enrolled in the

fall of 2013

According to Schmill, the decreased target class size was not the only reason that MIT admitted fewer students to the Class of 2018.

"We admitted fewer students also because our yield has been going up. If a higher percentage of admitted students choose to enroll, we have to admit fewer students so we do not over-enroll," Schmill said.

Currently, it is unclear what the target class size will be in the coming years.

#### Adjustments in admissions

This year, MIT made adjustments to how it counts the number of applicants. In the past, all applicants who paid an admissions fee or received a fee waiver were counted in the final applicant data. This year's total number of applicants includes only students who both paid the application fee (or received a fee waiver) and completed the entire student section of the application.

According to the MIT News Office, the total number of applicants this year represents a 2.5 percent increase from last year's when counted with the previous methodology — the most in MIT's history. However, with the switch to the new counting method, the total number of applicants reported by MIT this year is slightly lower than that reported last year.

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# Evidence for theory in cosmology found

#### Inflation theory tied to Big Bang

Guth, from Page 1

apart when it was roughly a trillionth of a trillionth of a trillionth of a second old. They are the long-sought smoking-gun evidence of inflation, proof, Kovac and his colleagues say, that Guth was correct.

Inflation has been the workhorse of cosmology for 35 years, though many, including Guth, wondered whether it could ever be proved.

If corroborated, Kovac's work will stand as a landmark in science comparable to the recent discovery of dark energy pushing the universe apart, or of the Big Bang itself. It would open vast realms of time and space and energy to science and speculation.

Confirming inflation would mean that the universe we see, extending 14 billion light-years in space with its hundreds of billions of galaxies, is only an infinitesimal patch in a larger cosmos whose extent, architecture and fate are unknowable. Moreover, beyond our own universe there might be an endless number of other universes bubbling into frothy eternity, like a pot of pasta water boiling over.

In our own universe, it would serve as a window into the forces operating at energies forever beyond the reach of particle accelerators on Earth and yield new insights into gravity itself. Kovac's ripples would be the first direct observation of gravitational waves, which, according to Albert Einstein's theory of general relativity, should ruffle space-time.

According to inflation theory, the waves are the hypothetical quantum particles, known as gravitons, that carry gravity, magnified by the expansion of the universe to extragalactic size.

"You can see how the sky is being distorted by gravitational waves,"

said Andrei Linde, a prominent inflation theorist at Stanford. "We are using our universe as a big microscope. The sky is a photographic plate."

Marc Kamionkowski of Johns Hopkins University, an early-universe expert who was not part of the team, said, "This is huge, as big as it gets."

"Although I might not fully understand it," Kamionkowski said, "this is a signal from the very earliest universe, sending a telegram encoded in gravitational waves."

The ripples manifested themselves as faint spiral patterns in a bath of microwave radiation that permeates space and preserves a picture of the universe when it was 380,000 years old and as hot as the surface of the Sun.

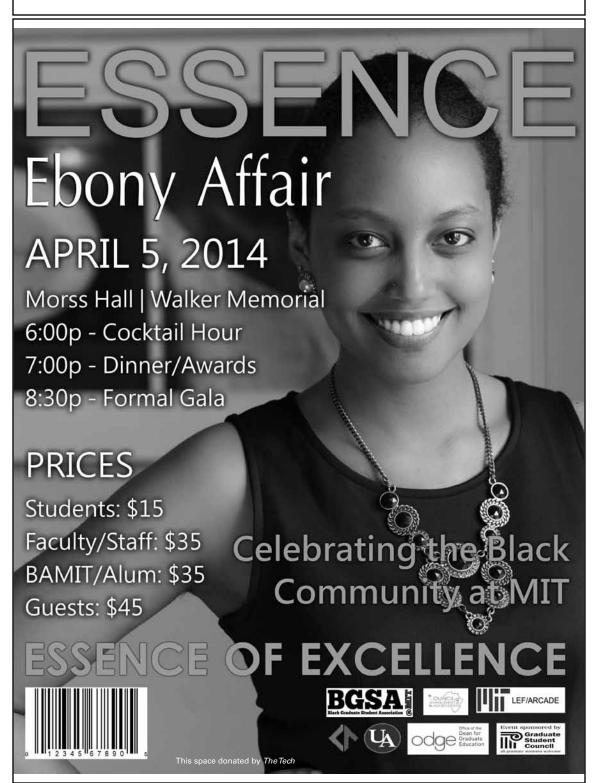
Kovac and his collaborators, working in an experiment known as BICEP, for Background Imaging of Cosmic Extragalactic Polarization, reported their results in a scientific briefing at the Center for Astrophysics here on Monday and in a set of papers submitted to The Astrophysical Journal.

Kovac said the chance that the results were a fluke was only one in 3.5 million — a gold standard of discovery called five-sigma.

Guth pronounced himself "bowled over," saying he had not expected such a definite confirmation in his lifetime.

"With nature, you have to be lucky," he said. "Apparently we have been lucky."

The results are the closely guarded distillation of three years' worth of observations and analysis. Eschewing email for fear of a leak, Kovac personally delivered drafts of his work to a select few, meeting with Guth, who is now a professor at MIT (as is his son, Larry, who was sleeping that night in 1979), in his office last week.



10 The Tech
Tuesday, March 18, 2014



A couple dances to the tunes of the Compaq Big Band, the main musical attraction at Friday's Beaver Ball in Walker Memorial. The event was a celebration of MIT mascot Tim the Beaver's 100-year anniversary.

SPRING 2014

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# Gender affirmation surgery is insured

# LBGT@MIT and MIT Trans Care team pushed for coverage change

Insurance, from Page 1

affirming, gender-inclusive, and trans\*-friendly resources, professional development, and campuswide education and awarenessraising opportunities," Walsh and Francis wrote in an email to *The Tech*.

They said that LBGT@MIT collaborated with the MIT Trans Care team and student advocates to push for expanded coverage.

Walsh and Francis said that while the Employee Benefits Oversight Committee was able to extend the coverage to MIT employees last summer, a Student and Affiliate Health Insurance Advisory Committee was still being formed to investigate the effects of the Affordable Care Act on student insurance plans at the time, causing the delay in the availability of the benefit for students.

"Since there is a cost associated with adding any new coverage, it was appropriate for this decision to be considered in context with the other benefit changes that need to be made to be in compliance with the Affordable Care Act. The first meeting of the new Committee was in November 2013," they wrote.

The recommendation to add the benefit came in January and was approved by top administrators, effective Feb. 1.

According to Walsh and Francis, "The Student Extended Insurance Plan is a Blue Cross Blue Shield Preferred Provider Organization, or PPO. Benefits will be determined based on the Blue Cross Blue Shield of MA established medical policy." Service providers contracted under Blue Cross will submit claims directly, whereas students may need to pay for services at non-contracted providers themselves and later seek reimbursement. Walsh and Francis said Claims and Members Services on the first floor of E23 could provide more information.

According to nonprofit LGBT advocacy group Campus Pride, over 50 colleges and universities in the U.S. cover both GAS and hormone treatments for students, while nearly twenty cover only hormone treatments under student plans. According to Campus Pride and student newspapers at the institutions, all Ivy League universities except Columbia University provide coverage for GAS under student plans. Harvard added the coverage in November 2011.

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#### **Solution to Crossword**

from page 8



#### **EVENTS**

MAR. 18 - MAR. 24

#### TUESDAY

(4 p.m. – 5 p.m.) The Build-up of Galaxies over the Past 10 Billion Years talk by Pieter van Dokkum — 37-252

(6:30 p.m. - 9:00 p.m.) Space Exploration in Italy and the U.S.: Human Experiences and Innovative Challenges — 66-110

#### WEDNESDAY

(12 p.m. – 1 p.m.) Artists Beyond the Desk Presents Howard Martin saxophone performance — Killian Hall

(4 p.m. - 6 p.m.) Free Healthy Smoothie Day — Z-Center lobby

#### THURSDAY

(12 p.m. - 1 p.m.) Brown Bag Lunch: Capturing Contributor Roles in Scholarly Publications — E25-131

(6 p.m. - 8 p.m.) Designing the Next Generation of Wearable Devices — Microsoft NERD Center 1 Memorial Dr.

#### FRIDAY

(5:30 p.m. - 6:15 p.m.) Discussion Series: Human Rights — 50-020

(7 p.m. - 9 p.m.) Women Take the Reel presents Salma — 6-120

#### SATURDAY

(7 a.m. - 8 p.m.) LibrePlanet 2014 conference — 32-1st floor

(7:30 p.m.) Norouz Celebration, Persian festival — Walker Memorial

#### SUNDAY

(2:30 p.m. - 5:00 p.m.) MIT Ballroom Dance Workshops: Salsa and Merengue — W20-La Sala

Send your campus events to events@tech.mit.edu.

#### News briefs, from Page 1

Tuition increases annually; the lowest increase in recent years was 3.24 percent in the 2012–2013 academic year, while the largest increase was 4.9 percent in 2005-2006.

Tuition and fees will total \$45,016, as opposed to \$43,498 for the 2013-2014 academic year. Meanwhile, MIT has lowered its need-based undergraduate financial aid budget, which is set at \$95 million this year, compared to last year's \$97.6 million.

that students with family incomes below \$75,000 per year will have their tuition expenses covered by scholarship funding. About 32 percent of the 4,477 undergraduates at MIT attend tuition-free.

MIT will continue its policy

Total estimated expenses per student, consisting of tuition, fees, housing, and dining, will be about \$58,240 in the coming academic year, compared to the estimated \$56,242 from the 2013-2014 academic year.

—Alexandra Delmore

#### Solution to Techdoku I

1	2	3	6	4	5
5	6	1	4	2	3
6	1	2	5	3	4
2	3	4	1	5	6
3	4	5	2	6	1
4	5	6	3	1	2

#### Solution to Techdoku II

1	6	5	2	3	4
2	1	6	ფ	4	5
3	2	1	4	5	6
4	3	2	5	6	1
5	4	3	6	1	2
6	5	4	1	2	3

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#### Solution to Sudoku I

from page 5

1	7	6	5	4	8	9	3	2
3	5	4	2	7	9	1	6	8
8	2	9	3	1	6	7	4	5
2	1	3	9	8	7	6	5	4
7	4	5	1	6		3	8	9
6	9	8	4	3	5	2	7	1
9	3	1	7	5	4	8	2	6
4	6	7	8	2	1	5	9	3
5	8	2	6	9	3	4	1	7

#### Solution to Sudoku II

from page 5

9	1	4	8	3	6	2	5	7
8	5	6	7	2	1	4	3	9
2	7	3	4	5	9	1	8	6
1	2	7	9	6	5	3	4	8
6	8	9	3	1	4	5	7	2
3			2	7	8	9	6	1
4	3	8	1	9	7	6	2	5
5	9		6	8	3	7	1	4
7	6	1	5	4	2	8	9	3

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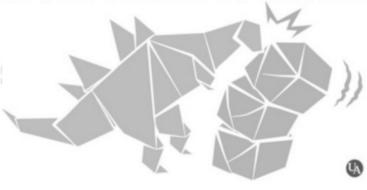
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# ORTS SPORTSSPORTS

# Fans await rise of next prodigy in men's tennis

#### Grigor Dimitrov and Ernests Gulbis show promise as men's tennis' next big players

By Deepak Narayanan

For the first time in a while, men's tennis is confronted with potential flux. With Federer now in his 30s and the likes of Nadal, Djokovic, and Murray in their midto late-twenties, the time seems ripe for the next tennis prodigy to burst onto the world stage.

Of all the young players on the circuit right now, I think Grigor Dimitrov is the most likely to make the jump to the next level. He is currently the youngest man in the top 20, and the results this year have been pretty impressive. Added to that, he has a very capable coach in Roger Rasheed, who has also coached the likes of Lleyton Hewitt, Gael Monfils, and Jo-Wilfred Tsonga and seems to have

done his game a world of good.

I first saw Dimitrov play at the start of the 2012 season in the Hopman Cup in Perth, Australia. Even back then, he looked like quite a handful. Some of his shots were absolutely stunning, and his single-handed backhand was a real thing of beauty. His decision-making, however, was often questionable.

# Greatness is often determined by the intangibles.

Two years later, the Bulgarian hasn't really lived up to expectations. His results throughout 2012 and 2013 were inconsistent, with prolonged periods of sluggishness punctuated by the occasional moment of sheer brilliance. Before 2014, Dimitrov had made it past the second round of a Grand Slam only once. But in this year's Australian Open, he finally displayed the fight and grit to first take out Canadian Milos Raonic in a grueling four-set match in the third round, and then played some brilliant tennis to push Nadal to the brink in the quarterfinals.

That solid performance was followed by a title at the ATP World Tour 500 event at Acapulco, where he first beat a struggling Andy Murray in the semifinals and then defeated the big-serving Kevin Anderson from South Africa in the final to lift his first title of the year. He showed that he's finally developing the tempera-

ment to win matches against the top players.

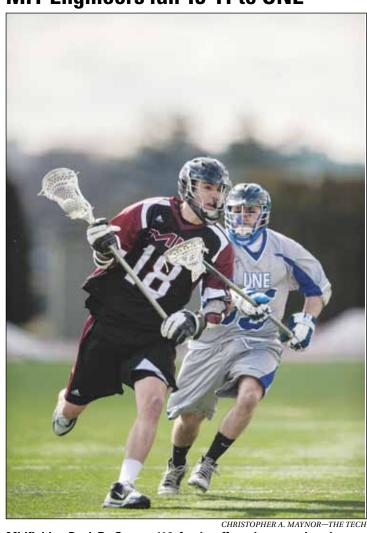
Dimitrov is not the only man who's been resurgent this season — Ernests Gulbis has been in impressive form as well. The Latvian won in Marseilles, to add to his semifinals performance at the ABN Amro World Tennis Championships in Rotterdam and quarterfinals performance last week in Indian Wells. His good showing so far this year has propelled him to a career-high World No. 18, but for a man of his talent and ability, success surely needs to be measured by performances in the majors.

Another contender for future World No. 1, Jerzy Janowicz, has disappointed since his breakthrough performance at Wimbledon last year; however, with a strong serve and offensive ground game, he has the potential to become the next big thing, provided he can become more consistent.

Other potential players capable of taking the next big step include the Australian enigma, Bernard Tomic, who promised so much as a multiple Junior Grand Slam winner, but whose game recently seems to be weighed down by multiple off-court issues. Two Canadians — Milos Raonic, one of the biggest servers on tour, and Vasek Pospisil, one of the revelations of 2013 — may also rise to prominence.

All things said, greatness in a sport is oftentimes determined by the intangibles, so it will be interesting to see who dominates tennis after the Golden Era.

#### MIT Engineers fall 13-11 to UNE



Midfielder Paul R. Orrson '16 fends off a player as he charges downfield during Saturday afternoon's game against the University of New England. Behind by two with only 5:15 left in the game, UNE managed to score five unanswered goals in these final minutes to win the game 13-11.

#### **UPCOMING HOME EVENTS**

Tuesday, March 18

Softball vs. Simmons College Softball vs. Simmons College 3 p.m., Briggs Field 5 p.m., Briggs Field

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# MIT ballroom dance team dominates in tournament

MIT's rookies, others participate in Big Apple Dance Competition at Columbia University

By Amy C. Fan
TEAM REPRESENTATIVE

On the weekend of March 7 - 9, several couples on the MIT Ballroom Dance Team (MIT-BDT) traveled to Columbia University to compete in the Big Apple Dance Competition (BADC), one of the largest such competitions on the East Coast. Of note, every MITBDT rookie, that is anyone who is a first year dancer on the team, made at least several semifinals. This year's rookie class dominated in the newcomer finals. We also had a team couple place as a finalist in Champ, the highest skill level.

The two-day competition began with the American Rhythm and International Standard events. With over twenty couples competing in the Newcomer events, Daniel R. Chen '16 and Brittany N. Bautista '17 placed second overall in Newcomer American Rhythm, while

Zohaib Mahmood G and Francesca Y. Majluf '17 placed third overall. Chen went on to finish first overall in the Newcomer International Standard with his partner Casey R. Crownhart '17. Daniel D. Richman '17 and Devon A. Sklair '15 placed second overall.

The Bronze Rhythm had over fifty couples competing with varying experience in dancing. Some of the dancers were quite experienced, while MIT's own Corey A. Cleveland '17, for example, had only six months of dancing experience. Cleveland successfully finished second place overall with his partner Clio Flikkema from Wellesley College in the Bronze Rhythm.

On Sunday, March 9, the MITBDT dancers participated in the American Smooth and International Latin events. Chen and Crownhart, and Richman and Sklair once again showed their prowess and placed first overall and third overall, respec-

tively, in the Newcomer Smooth event. Mahmood and Majluf nabbed first overall in the International Latin event. Cleveland and Flikkema also placed first overall in the Bronze Smooth.

In addition to the rookie class, a few other MITBDT couples also attended the Columbia competition. Jorge L. Valdez G and Laura J. Perovich G placed sixth in the Silver American Rhythm Swing/Mambo, and seventh in the Silver International Latin Samba/Jive. Alex Martinov G and Julia Shen placed third in the Prechamp International Standard Waltz/ Tango/Foxtrot/Quickstep and second in the Prechamp International Standard Viennese Waltz. Ben Moss G and Esther Rheinbay placed fifth overall in the Champ International Standard.

The next competition for MIT will be the Harvard Invitational at the Hynes Convention

# Men's volleyball team stays undefeated en route to title

MIT claims second straight championship title at the Johnson & Wales University Invitational

By Mindy Brauer

The MIT men's volleyball team went 4-0 en route to its second straight championship title at the Johnson & Wales University Invitational held this past weekend. The No. 5 Engineers (20-4) defeated York College (N.Y.) (25-0, 25-22, 25-11), Vassar College (25-21, 25-27, 20-25, 25-19, 15-5), Wentworth Institute of Technology (25-20, 25-19, 25-23), and the host Wildcats (25-22, 25-20, 25-14) for the crown. Paul M. Syta '14 was named the tournament Most Outstanding Player while Brendan S. Chang '16 represented the Cardinal and Gray on the All-Tournament Team.

Kenneth M. Siebert '14 led the way with nine kills and a .571 hitting performance as Martin J. Krasuski '17 connected on five of his six hitting attempts versus York. Aaron D. Zalewski '17 was 3-of-4 in his attacking effort while Andrew A. Busse '15 posted four kills and two blocks. Syta tallied seven assists, four kills, three digs, and two blocks as Evan P. Wang '14 dished out 14 assists. Chang rounded out the squad with 11 digs.

In the five-set come-frombehind victory over Vassar, Krasuski compiled 10 kills, nine digs, two aces, and two blocks. Alexander C. Klein '15 paced MIT with 14 kills and added two blocks as Busse generated 12 kills, a 0.562 hitting percentage, and three blocks. Zalewski had six kills and six blocks, while Siebert chipped in five kills, two aces, and two blocks. Syta totaled 32 assists, nine digs, and two blocks as Wang distributed 12 assists. For the second time on Friday, Chang was the match leader in digs as he collected 12.

Klein powered the front row with 13 kills and five

blocks, while Siebert totaled 12 kills and five digs against Wentworth. Krasuski posted six kills and two blocks as Syta compiled 20 assists, four kills, and four digs. Chang amassed 15 digs while Jordan W. Lucier '17 racked up eight of his own. Wang bolstered the Engineers' offense by producing eight assists.

In the finale with Johnson & Wales, Siebert registered 15 kills, a 0.519 hitting performance, and four digs as Klein had 12 kills, a 0.409 hitting percentage, and two blocks. Zalewski notched six blocks and two aces, while Busse earned a pair of blocks. Syta recorded 25 assists and three blocks as Chang gathered 13 digs.

MIT returns to action on Saturday, March 22 when it visits No. 10 Stevens Institute of Technology for its final United Volleyball Conference match of the season.